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10/792,028	03/02/2004	Kenneth B. Kidder	H0005197	1376

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Honeywell International, Inc.
Patent Services Group
101 Columbia Road
Morristown, NJ 07962

EXAMINER

HO, HUY C

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/792,028	Applicant(s) KIDDER ET AL.	
	Examiner Huy C. Ho	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/02/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/26/2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (2004/0201448) and further in view of Andric et al. (2004/0018839).

Consider claim 1, (Currently amended) Wang discloses a method for wireless association between a controller and a wireless node, the method comprising:

transmitting association request data from the wireless node, the association request data including unique identification (ID) data for the wireless node (sections [33]-[34]);

receiving the association request data at the controller (section [33]) and[[,]] in response, assigning association ID data including a master ID exclusively identifying the controller relative to any other controller within communication range of the wireless node (sections [34]-[35]) an ID corresponding to a network served by the controller and of which the wireless node is operating, and a slave ID exclusively assigned to the wireless node relative to any other wireless nodes in the network (sections [34]-[36]);

sending the association ID data assigned to the wireless node by the controller using the unique ID with the association ID data to identify the wireless node as the intended recipient of the association ID data (sections [34]-[36]), the controller storing the association ID data for use in sending wireless signals to the wireless node (sections [15]-[16]); and

receiving and storing the association ID data at the wireless node as a function of the unique ID (section [36]), thereby associating the wireless node with the controller identified by the master ID and operating in the network identified by the ID (section [35]).

Wang does not specify the unique ID code a network ID. Andric discloses master ID and network ID (see sections [189]-[190]).

Since both Wang and Andric teach wireless communication system of multiple nodes, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Wang and have network ID, taught by Andric, to improve the communication system discussed by Andric (see section [4]).

Consider claim 17, (Currently amended) Wang discloses a method for wirelessly communicating between a controller and a wireless node, the method comprising:

transmitting association request data from the wireless node, the association request data including a unique device ID for the wireless node (sections [33]-[34]);

receiving the association request data at the controller (section [33]) and, in response, assigning association ID data including a master ID exclusively identifying the controller relative to any other controller within communication range of the wireless node (sections [34]-[35]), an ID corresponding to a network served by the controller and of which the wireless node is operating, and a slave ID exclusively assigned to the wireless node relative to any other wireless nodes in the network (sections [34]-[36]);

sending an association ID assigned to the wireless node by the controller using the unique device ID with the association ID to identify the wireless node as the intended recipient of the association ID ([34]-[36]), the controller storing the association ID for use in sending wireless messages to the wireless node (sections [15]-[16]);

receiving and storing the association ID data at the wireless node as a function of the unique ID (section [36]);

using at least the slave ID of the stored association ID data at the wireless node to identify incoming wireless messages from the controller as messages intended for the wireless node (sections [33]-[35]); and

using at least the master ID and the ID of the association ID data at the controller identified by the master to identify incoming wireless messages sent from the wireless node (sections [33]-[35]).

Wang does not specify the unique ID code a network ID. Andric discloses master ID and network ID (see sections [189]-[190]).

Since both Wang and Andric teach wireless communication system of multiple nodes, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Wang and have network ID, taught by Andric, to improve the communication system discussed by Andric (see section [4]).

Consider claim 23, (Currently amended) Wang discloses a method for controlling a plurality of wireless thermostats in communication range with at least one gateway, each wireless thermostat coupled to control HVAC type equipment (section [22]), the method comprising:

transmitting association request data from [[a]]one of the wireless thermostats configured to control the HVAC type equipment, the association request data including unique identification (ID) data for the wireless thermostat (sections [33]-[34]);

receiving the association request data at the gateway and, in response, sending gateway-owned association ID data assigned to the wireless thermostat by the gateway using the unique ID to identify the wireless thermostat as the intended recipient of the association ID, the gateway storing the association ID data for use in sending wireless messages to the wireless thermostat and to identify incoming wireless messages sent from the wireless thermostat (sections [15]-[16], [34]-[36]);

receiving and storing the gateway-owned association ID data at the wireless thermostat as a function of the unique ID to identify incoming wireless messages from the gateway as messages intended for the wireless thermostat (section [36]);

communicating control messages from the gateway to the wireless thermostat using the association ID data to identify the wireless thermostat as the intended recipient of the control messages (sections [33]-[35]); and

at the wireless thermostat, accepting the control messages as function of the association ID data and, in response to the control messages, controlling HVAC equipment coupled to the wireless thermostat (sections [33]-[35]).

Wang does not specify a control master node a gateway node. Andric discloses a gateway node (see sections [180]-[181]).

Since both Wang and Andric teach wireless communication system of multiple nodes, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Wang and have a gateway node, taught by Andric, to improve the communication system discussed by Andric (see section [4]).

Consider claim 29, (Currently amended) Wang discloses a system for wireless association between a controller and a wireless node, the system comprising:

means for transmitting association request data from the wireless node, the association request data including unique identification (ID) data for the wireless node (sections [33]-[34]);

means for receiving the association request data at the controller and, in response, assigning association ID data including a master ID exclusively identifying the controller relative to any other controller within communication range of the wireless node, a network ID corresponding to a network served by the controller and of which the wireless node is operating, and a slave ID exclusively assigned to the wireless node relative to any other wireless nodes in the network (sections [15]-[16], [34]-[36]);

means for sending the association ID data assigned to the wireless node by the controller using the unique ID with the association ID data to identify the wireless node as the intended recipient of the association ID data, the controller storing the association ID data for use in sending wireless signals to the wireless node (sections [15]-[16]); and

means for receiving and storing the association ID data at the wireless node as a function of the unique ID (section [36]), thereby associating the wireless node with the controller identified by the master ID and operating in the network identified by the ID (section [35]).

Wang does not specify the unique ID code a network ID. Andric discloses master ID and network ID (see sections [189]-[190]).

Since both Wang and Andric teach wireless communication system of multiple nodes, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Wang and have network ID, taught by Andric, to improve the communication system discussed by Andric (see section [4]).

Consider claim 30, (Currently amended) Wang discloses a system for wireless communication, the system comprising:

- a controller (figure 1, section [20]);

- a wireless node (figure 1, section [20]);

- the wireless node being configured and arranged for transmitting association request data including unique identification (ID) data for the wireless node (sections [33]-[34]);

- the controller being configured and arranged for receiving the association request data (section [33]) and, in response, assigning association ID data including a master ID exclusively identifying the controller relative to any other controller within communication range of the wireless node (sections [34]-[35]), a ID corresponding to a network served by the controller and of which the wireless node is operating, and a slave ID exclusively assigned to the wireless node relative to any other wireless nodes in the network, the controller being further configured to send the for sending association ID data assigned to the wireless node by the controller using the unique ID with the association ID data to identify the wireless node as the intended recipient of the association ID data (sections [34]-[36]), the controller storing the association ID data for use in sending wireless signals to the wireless node (sections [15]-[16]); and

- the wireless node being configured and arranged for receiving and storing the association ID data as a function of the unique ID (section [36]), thereby associating the wireless node with the controller (section [35]).

Wang does not specify the unique ID code a network ID. Andric discloses master ID and network ID (see sections [189]-[190]).

Since both Wang and Andric teach wireless communication system of multiple nodes, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Wang and have network ID, taught by Andric, to improve the communication system discussed by Andric (see section [4]).

Consider claim 2, (Original) The method of claim 1, Wang, as modified by Andric, further teaches:

using the stored association ID data at the wireless node to identify incoming wireless signals from the controller as signals intended for the wireless node (sections [14]-[15]).

Consider claim 3, (Original) The method of claim 1, Wang, as modified by Andric, further teaches:

using the association ID data at the controller to identify incoming wireless signals sent from the wireless node as coming from the wireless node (sections [14]-[15]).

Consider claim 4, (Original) The method of claim 1, Wang, as modified by Andric, teaches wherein assigning association ID data includes assigning network ID data corresponding to a network of wireless nodes served by the controller (see sections [189]-[190]).

Consider claim 5, (Original) The method of claim 4, Wang, as modified by Andric, teaches further comprising selecting the network ID data by parsing network ID data in use within range of the controller and selecting network ID data that is not in use within range (see sections [189]-[190]).

Consider claim 6, (Original) The method of claim 1 Wang, as modified by Andric, further teaches wherein assigning association ID data includes assigning slave ID data that is exclusively assigned to the wireless node among wireless nodes within a network of wireless nodes (pars [14]-[15], [23], [31], [34]).

Consider claim 7, The method of **claim 1**, Wang, as modified by Andric, further teaches wherein assigning association ID data includes assigning master ID data that is exclusive to the controller relative to controllers within communication range of the wireless node (**pars [14]-15], [23], [31], [34]**).

Consider claim 8, (Original)The method of **claim 7**, Wang, as modified by Andric, further teaches after assigning association ID data, further comprising replacing the controller with a new controller, storing the association ID data at the new controller and using the master ID data to identify the new controller (**see pars [31], [33], [35]-[36]**).

Consider claim 9, (Original)The method of **claim 1**, Wang, as modified by Andric, further teaches prior to transmitting association request data, further comprising inputting an association request at the wireless node and wherein transmitting association request data includes transmitting the association request data in response to the association request input (**par [22]**).

Consider claim 10, (Original) The method of **claim 9**, Wang, as modified by Andric, further teaches entering an association mode at the wireless node for a selected time period and exiting the association mode after the selected time period has expired, wherein receiving and storing the association ID data at the wireless node includes receiving and storing the association ID data if the wireless node is in the association mode (**pars [37]-[38]**).

Consider claim 11, (Original)The method of **claim 9**, Wang, as modified by Andric, further teaches inputting an association request input at the controller and wherein sending association ID data includes sending the association ID data in response to both the association request input at the controller and the received association request data (**par [44]**).

Consider claim 12, (Original) The method of **claim 11**, Wang, as modified by Andric, further teaches entering an association mode at the controller for a selected time period and exiting the association mode after the selected time period has expired, wherein receiving the association request

data at the controller and, in response, sending association ID data includes sending association ID data if the controller is in the association mode (par [44]).

Consider claim 13, (Original)The method of claim 1, Wang, as modified by Andric, further teaches after receiving and storing the association ID data at the wireless node, replacing the wireless node with a new wireless node by storing the association ID data at the new wireless node ([14]-[16]).

Consider claim 14, (Original)The method of claim 1 Wang, as modified by Andric, further teaches sending messages to the wireless node using the association ID data to identify the wireless node as the intended recipient of the messages and using the messages at the wireless node to control equipment coupled thereto ([14]-[15]).

Consider claim 15, (Original) The method of claim 1, Wang, as modified by Andric, further teaches prior to sending association ID data, further comprising:

sending a conflict checking message including a network ID to be used with the association ID ([35], [38], [41]-[42]);

in response to receiving a network ID conflict response of another controller to the conflict checking message, selecting a new network ID to be included with the association ID and re-sending a conflict checking message ([35], [38], [41]-[42]); and

in response to not receiving a network ID conflict response, sending the association ID data ([35], [38], [41]-[42]).

Consider claim 16, (Original) The method of claim 1, Wang, as modified by Andric, further teaches: using the controller to monitor wireless conflict checking messages from other controllers within range of the controller; and in response to receiving a conflict checking message including a network ID that is in use by the controller, sending a conflict response ([35], [38], [41]-[42]).

Consider claim 18, (Original) The method of claim 17, Wang, as modified by Andric, further teaches wherein storing association ID data at the controller includes storing range limits for association IDs of wireless nodes assigned to the controller, and wherein identifying messages sent from the wireless node to the controller with the association ID data includes determining whether the association ID data is within the stored range limits (par [23]-[24]).

Consider claim 19 (Original), The method of claim 18, Wang, as modified by Andric, further teaches: in response to the association ID data being within a predetermined range, processing the association ID data at the controller (par [23]-[24]); and

in response to the association ID data being outside of the predetermined range, ignoring the association ID data at the controller (par [23]-[24]).

Consider claim 20, (Currently amended) The method of claim 17, Wang, as modified by Andric, further teaches ~~wherein assigning association ID data includes assigning network ID data corresponding to a network of wireless nodes served by the controller and~~ wherein using the association ID data at the controller to identify incoming wireless messages sent from the wireless node includes determining, at the controller, that the network ID data corresponds to a network served by the controller (pars [14]-[15], [22], [31]).

Consider claim 21, (Currently amended) The method of claim 17, Wang, as modified by Andric, further teaches wherein ~~the assigning association ID data includes assigning~~ master ID data is exclusive to the controller relative to controllers within communication range of the wireless node and wherein using the association ID data at the controller to identify incoming wireless messages sent from the wireless node includes determining, at the controller, that the master ID data corresponds to the controller's master ID data (pars [14]-15], [23]-[24], [31], [34]).

Consider claim 22, The method of claim 17, Wang, as modified by Andric, further teaches wherein using the stored association ID data at the wireless node to identify incoming wireless messages includes identifying the incoming wireless messages from a plurality of incoming wireless

messages traversing shared media that is susceptible to the transmission of multiple wireless messages ([14]-[15]).

Consider claim 24, (Currently amended) The method of claim 23, Wang, as modified by Andric, further teaches:

generating the gateway-owned association ID to include a master ID exclusively identifying the gateway relative to any other gateway within communication range of the wireless thermostat (section [35]), a network ID corresponding to a network served by the gateway and of which the wireless thermostat is operating, and a slave ID exclusively assigned to the wireless thermostat relative to any other wireless thermostats in the network (sections [34]-[36]); and

using the association ID to label compliance data sent from the wireless thermostat to identify the source of the compliance data, the compliance data being indicative of user compliance with the utility control messages (sections [34]-[36]).

Consider claim 26, The method of claim 23, Wang, as modified by Andric, further teaches wherein communicating control messages from the gateway includes communicating control messages in response to control messages received at the gateway from a local utility company (pars [6]-[7], [14]-[15], [21]).

Consider claim 27, (Original) The method of claim 23, Wang, as modified by Andric, teaches wherein communicating control messages from the gateway includes broadcasting information from the gateway to a plurality of wireless thermostats using a network ID included with the association ID, each of the plurality of wireless thermostats being adapted to receive the broadcast information as a function of the network ID portion of the association ID (section [88], [98]).

Consider claim 28, (Original) The method of claim 27, Wang, as modified by Andric, teaches wherein each wireless thermostat is adapted to respond to the broadcast information as a function of user inputs received at the wireless thermostat and to report a condition of the response to the gateway using the association ID to identify the wireless thermostat from which the reported condition was sent (section [88], [98]).

Consider claim 31, (Original)The system of **claim 30**, Wang, as modified by Andric, further teaches wherein the wireless node is configured and arranged to use the stored association ID data at the wireless node to identify incoming wireless signals from the controller as signals intended for the wireless node (pars [14]-[15], [22], [31]).

Consider claim 32, (Original)The system of **claim 30**, Wang, as modified by Andric, further teaches wherein the controller is configured and arranged to use the association ID to identify incoming wireless signals sent from the wireless node as coming from the wireless node (pars [14]-[15], [34]).

Consider claim 33, (Original)The system of **claim 30**, Wang, as modified by Andric, further teaches wherein the controller is configured and arranged to: prior to sending association ID data, send a conflict checking message including a network ID to be used with the association ID ([35], [38], [41]-[42]);

in response to receiving a network ID conflict response of another controller to the conflict checking message, select a new network ID to be included with the association ID and re-send a conflict checking message ([35], [38], [41]-[42]); and

in response to not receiving a network ID conflict response, send the association ID data ([35], [38], [41]-[42]).

7. **Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (2004/0201448) in view of Andric et al. (2004/0018839) and further in view of Simmons et al. (6,349,883).**

Consider claim 25, (Original) The method of claim 24, further comprising sending the compliance data from the gateway to a local utility provider.

Wang, as modified by Andric, does not show a local utility provider. Simmons discloses a local utility provider (see figure 2, col 6 lines 6-67, col 7 lines 1-25).

Since Wang, Andric and Simmons teach wireless communication system and HVAC system, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made


to modify the teachings of Wang, being modified by Andric, and have a local utility provider, taught by Simmons, to improve the HVAC system discussed by Simmons (see col 1 lines 15-67, col 2 lines 1-60).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy C. Ho whose telephone number is (571) 270-1108. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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